1. *(Original)* An *in situ* method for maturing and producing oil and gas from a deep-lying, impermeable formation containing immobile hydrocarbons, comprising the steps of:

(a) pressure fracturing a region of the hydrocarbon formation, creating a plurality of substantially vertical, propped fractures;

(b) injecting under pressure a heated fluid into a first part of each vertical fracture, and recovering the injected fluid from a second part of each fracture for reheating and recirculation, said pressure being less than the fracture opening pressure, said injected fluid being heated sufficiently that the fluid temperature upon entering each fracture is at least 260°C but not more than 370°C, and the separation between said first and second parts of each fracture being less than or approximately equal to 200 meters;

(c) recovering, commingled with the injected fluid, oil and gas matured in the region of the hydrocarbon formation due to heating of the region by the injected fluid, the permeability of the formation being increased by such heating thereby allowing flow of the oil and gas into the fractures; and

(d) separating the produced oil and gas from the recovered injection fluid.

2. *(Original)* The method of claim 1, wherein the hydrocarbon formation is oil shale.

3. *(Original)* The method of claim 1, wherein the fractures are substantially parallel.

4. *(Original)* The method of claim 3, wherein at least eight fractures are created, spaced substantially uniformly at a spacing in the range 10-60 m, said fractures being propped to have permeability of at least 200 Darcy.

5. *(Original)* The method of claim 1, wherein at least one well is used to create the fractures and to inject and recover the heated fluid from the fractures.

6. *(Original)* The method of claim 5, wherein all wells are vertical wells.

7. *(Original)* The method of claim 5, wherein all wells are horizontal wells.

8. *(Original)* The method of claim 5, wherein wells used to create fractures are also used for injection and recovery.

9. *(Original)* The method of claim 5, wherein the injection and recovery wells have a plurality of completions in each fracture, at least one completion being used for injection of the heated fluid and at least one completion being used for recovery of the injected fluid.

10. *(Original)* The method of claim 9, wherein the injection and return completions are periodically reversed to cause a more even temperature profile across the fracture.

11. *(Original)* The method of claim 5, wherein the wells lie substantially within the plane of their associated fractures.

12. *(Original)* The method of claim 5, wherein the planes of the fractures are substantially parallel and the wells are horizontal and substantially perpendicular to the planes of the fractures.

13. *(Original)* The method of claim 1, wherein the injected fluid has a volumetric thermal density of at least 30,000 kJ/m^3 as calculated by the difference between the mass enthalpy at the fracture entry temperature and at 270°C and multiplying by the mass density at the fracture entry temperature.

14. *(Original)* The method of claim 13, wherein the injected fluid is a hydrocarbon.

15. *(Original)* The method of claim 14, wherein the hydrocarbon is naphtha.

16. *(Original)* The method of claim 14, wherein the injected hydrocarbon fluid is obtained from the recovered oil and gas.

17. *(Original)* The method of claim 13, wherein the injected fluid is water.

18. *(Original)* The method of claim 1, wherein the injected fluid is saturated steam and the injection pressure is in the range 1,200 – 3,000 psia, but not more than the fracture opening pressure.

19. *(Original)* The method of claim 1, wherein the depth of the heated region of the formation is at least 1,000 ft.

20. *(Original)* The method of claim 1, wherein the heating of the hydrocarbon formation is continued at least until the temperature distribution across each fracture is substantially constant.

21. *(Original)* The method of claim 1, wherein the depth of the heated region of the hydrocarbon formation is below the lowest-lying aquifer and a patchwork of sections of the hydrocarbon formation are left unheated to serve as pillars to prevent subsidence.

22. *(Original)* The method of claim 1, wherein the fluid pressure maintained in each fracture is at least 50% of the fracture opening pressure.

23. *(Original)* The method of claim 1, wherein the fluid pressure maintained in each fracture is at least 80% of the fracture opening pressure.

24. *(Original)* The method of claim 1, wherein non-Darcy flow of the injected fluid is substantially maintained throughout each fracture to the degree that the velocity squared term in the Ergun equation contributes at least 25% of the pressure drop calculated by such equation

25. *(Original)* The method of claim 5, wherein wells that intersect fractures are drilled while the fractures are pressurized above the drilling mud pressure.

26. *(Original)* The method of claim 1, wherein a degradation or coking inhibitor is added to the injected fluid.

27. *(New)* The method of claim 1, wherein the hydrocarbon region to be fractured lies about 1,000 feet or more below the earth's surface.

28. *(New)* The method of claim 2, wherein the oil shale region to be fractured lies about 1,000 feet or more below the earth's surface.